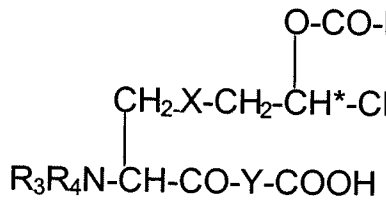
The following is a complete listing of all claims in the application, with an indication of the status of each:

Listing of claims:

1. (Previously presented) A method of vaccinating an animal or human in need thereof, comprising the steps of:

providing said animal or human, via mucous membranes of said animal or human, with an antigen; and

providing said animal or human, via mucous membranes of said animal or human, with an adjuvant in the form of a lipopeptide or lipoprotein of the structure (I)



(I)

where

R_1 and R_2, which may be identical or different, are C_{7-25}-alkyl, C_{7-25}-alkenyl or C_{7-25}-alkynyl,

X is S, O or CH_2,

R_3 and R_4 are independently of one another H or methyl and

Y is a physiologically tolerated amino acid sequence which consists of 1 to 25, preferably 12 to 25, amino acid residues and is not immunogenic per se in the species used,

and the asymmetric carbon atom marked with * as the absolute R configuration, according to the Cahn-Inhold-Prelog rule, when X is S (sulfur).

2. (Previously presented) The method of claim 1, wherein the amino acid sequence Y is selected from

a) GQTNT (SEQ ID NO: 1)

b) SKKKK (SEQ ID NO: 2)

c) GNNDESNISFKEK (SEQ ID NO: 3) and

d) GQTDNNSSQSAAPGSGTTNT.(SEQ ID NO: 4).

3. (Previously presented) The method of claim 1, wherein the lipoprotein or lipopeptide of structure (I) is an S-[2, 3-bispalmitoyloxy(2R)propyl]cysteinyl-peptide, where the peptide is a physiologically tolerated amino acid sequence which consists of 12 to 25 amino acid residues and is preferably not immunogenic in the species used.

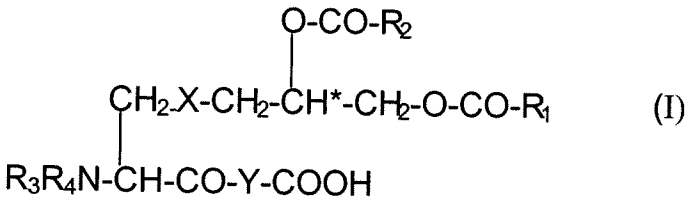
4. (Previously presented) The method of claim 1, wherein the adjuvant is present in a preparation with the antigen, and wherein said providing steps are performed simultaneously by an administration route selected from the group consisting of intranasal, intra-NALT, aerosolized oral, intrarectal, conjunctival, intravaginal or intraurethral administration or administration into the milk ducts of the female breast.

5. (Previously presented) The method of claim 1, wherein the adjuvant is present in a kit for coadministration with the antigen, and wherein each of said providing steps are performed by an administration route into the milk ducts of the female breast selected from the group consisting of intranasal, intra-NALT, aerosolized oral, intrarectal, conjunctival, intravaginal and intraurethral.

6. (Previously presented) A method of vaccinating an animal or human in need thereof, comprising the steps of:

providing said animal or human with an antigen component by a non-mucosal route; and

providing said animal or human with an adjuvant in the form of a lipopeptide or lipoprotein of the general structure (I)



(I)

where

R_1 and R_2, which may be identical or different, are C_{7-25}-alkyl, C_{7-25}-alkenyl or C_{7-25}-alkynyl,

X is S, O or CH_2,

R_3 and R_4 are independently of one another H or methyl and

Y is a physiologically tolerated amino acid sequence which consists of 1 to 25, preferably 12 to 25, amino acid residues and is not immunogenic per se in the species used, and the asymmetric carbon atom market with * as the absolute R configuration, according to the Cahn-Ingold-Prelog rule, when X is S (sulfur), excepting an S-(2,3-diacyloxypropyl)cysteinpeptide of the sequence DhcGNNDESNISFKEK (SEQ ID NO: 3), where at least one of the following provisos apply

i) N-terminally the amino acid at position 2 is absent,

ii) N-terminally the amino acid at position 3 is absent,

iii) C-terminally 1 to 2 amino acids are deleted.

7. (Previously presented) The method of claim 6 wherein said providing an animal or human with an adjuvant step simultaneously provides at least one further adjuvant or antigen.

8. (Previously presented) The method of claim 6 wherein the lipopeptide or lipoprotein is associated or combined with a physical or biological carrier.

9. (Previously presented) The method of claim 6 further comprising the step of providing, together with the lipopeptide or lipoprotein, one or more anti-inflammatory, antiangiogenic, cytotoxic or immunomodulatory substances, ligands or antibodies.

10. (Previously presented) The method of claim 6 further comprising the step of providing the animal or human with further additives and excipients.

11. (Previously presented) The method of claim 6 wherein the antigen is present in the form of peptides, proteins, DNA, polysaccharides, glycolipids or glycoproteins.

12. (Previously presented) The method of claim 1 wherein said providing an animal or human with an adjuvant step simultaneously provides at least one further adjuvant or antigen.

13. (Previously presented) The method of claim 1 wherein the lipopeptide or lipoprotein is associated or combined with a physical or biological carrier.

14. (Previously presented) The method of claim 1 further comprising the step of providing, together with the lipopeptide or lipoprotein, one or more anti-inflammatory, antiangiogenic, cytotoxic or immunomodulatory substances, ligands or antibodies.

15. (Previously presented) The method of claim 1 further comprising the step of providing the animal or human with further additives and excipients.

16. (Previously presented) The method of claim 1 wherein the antigen is present in the form of peptides, proteins, DNA, polysaccharides, glycolipids or glucoproteins.